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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/994,548

11/27/2001

George L. Yang

8202

7590

12/03/2004

George L. Yang
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Pikesville, MD 21208

EXAMINER

CAMPBELL, JOSHUA D

ART UNIT

PAPER NUMBER

2179

DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/994,548

Applicant(s)

YANG, GEORGE L.

Examiner

Joshua D Campbell

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Application filed on 11/27/2001, Preliminary Amendment filed on 12/27/2001.
2. Claims 1-13 are pending in this case. Claims 1, 3, and 13 are independent claims.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 7 ^{is} rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 7 recites the limitation "pinpointing the problem" on Page 24, line 5. There is insufficient antecedent basis for this limitation in the claim.

Dependent claims 8-11 are rejected for fully incorporating the deficiencies of their base claims-

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Koza (US Patent Number 5,136,686, issued on August 4, 1992).

Regarding independent claim 13, Koza discloses a method in which extraction, reconstruction, saving, and retrieving information from a source is used to make a bridge between equations in the source and equations in a database (column 15, lines 4-68 and column 55, lines 6-58 of Koza).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Pagallo (US Patent Number 5,627,914, issued on May 6, 1997) in view of Koza (US Patent Number 5,136,686, issued on August 4, 1992).

Regarding independent claim 1, Pagallo discloses a method in which an input means is used to convert information from a source into a proper format in order to modify the information, and an output means is used to presenting the information in various forms (column 3, line 53-column 5, line 17 of Pagallo). Pagallo does not disclose a method in which programming code is used reconstruct the information. However, Koza discloses a method in which LISP source code is generated and the information found is added to a database (column 15, lines 4-68 of Koza). It would have been obvious to one of ordinary skill in the art at the time the invention was made

to have combined the methods of Pagallo and Koza because it would have increased the problem solving ability to a larger population of problems.

Regarding dependent claim 2, Pagallo discloses a method in which input means allows for creation, modification, and display of formulas and equations and allows for collection of information from them (column 3, line 53-column 5, line 17 of Pagallo). The user may input special information when necessary (column 3, line 53-column 5, line 17 of Pagallo). Pagallo also discloses that the storage means comprises documents and a database (column 8, lines 1-47 of Pagallo).

Regarding independent claim 3, Pagallo discloses a method in which an environment is set up and information from a source is converted into a proper format (column 3, line 53-column 5, line 17 of Pagallo). Pattern recognition is then applied to portions of the file and properties are associated with items in the file, both equations and formulas are processed in this manner (column 3, line 53-column 5, line 17 of Pagallo). Pagallo does not disclose a method in which a curve is processed or that source code is generated. However, Koza discloses a method in which equations and curves may be processed, and LISP source code is generated and the information found is added to a database (column 15, lines 4-68 and column 55, lines 6-58 of Koza). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the methods of Pagallo and Koza because it would have increased the problem solving ability to a larger population of problems.

Regarding dependent claim 4, Pagallo discloses a method in which new properties are defined along with corresponding actions (column 3, line 53-column 5, line 17 of Pagallo).

Regarding dependent claim 5, Pagallo discloses a method in which properties are any things associated with items, which are needed by said processing means to extract useful information (column 3, line 53-column 5, line 17 of Pagallo). Pagallo discloses a method in which numbers, mathematical symbols, etc. are items and that properties may be associated with the items (column 3, line 53-column 5, line 17 of Pagallo).

Regarding dependent claim 6, Pagallo does not disclose a method in which a curve is separated, selected, ordered pairs represent it, or that parameters are bound to it. However, Koza discloses a method in which the curves are separated and one is selected (column 15, lines 4-68 and column 55, lines 6-58 of Koza). Parameters (equations) are bound to the curves that are represented by ordered pairs (column 15, lines 4-68 and column 55, lines 6-58 of Koza). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the methods of Pagallo and Koza because it would have increased the problem solving ability to a larger population of problems.

Regarding dependent claims 7-9, Pagallo discloses a method in which properties are bound to the equation and its components (column 3, line 53-column 5, line 17 of Pagallo). Pagallo also discloses a method of handling external functions, generating tokens by a scanner, generating symbol tables by a parser, and displaying

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the regenerated equation and formula (column 3, line 53-column 5, line 17 of Pagallo).

The properties are also displayed and the user has the power to change the properties and add more properties (column 3, line 53-column 5, line 17 of Pagallo).

Regarding dependent 10, Pagallo discloses a method in which a token is an inseparable item and a scanner is used to generate the tokens using the literal information and the properties associated with it (column 3, line 53-column 5, line 17 of Pagallo). Pagallo does not disclose a method in which the information from previous blocks that were handled is used. However, Koza discloses a method in which the system uses information gained from previously processed information to process items (column 15, lines 4-68 and column 55, lines 6-58 of Koza). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the methods of Pagallo and Koza because it would have increased the problem solving ability to a larger population of problems.

Regarding dependent claim 11, Pagallo discloses a method in which symbol tables are instances of data structures to describe the relation among the components of equations that is processed by a parser using grammar based on mathematics and information provided by the properties (column 3, line 53-column 5, line 17 of Pagallo). The user has the ability to provide information on how to process the equation (column 3, line 53-column 5, line 17 of Pagallo). Pagallo does not disclose a method in which the information from a database is used to parse the equation. However, Koza discloses a method in which the system uses information gained from previously processed information stored in a database to process items (column 15, lines 4-68 and

column 55, lines 6-58 of Koza). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the methods of Pagallo and Koza because it would have increased the problem solving ability to a larger population of problems.

Regarding dependent claim 12, Pagallo discloses a method where the data is saved in a different format than the original source that is stored in a maintained database (column 3, line 53-column 5, line 17 and column 8, lines 1-47 of Pagallo). Pagallo does disclose a method in which help files are created. However, it was well known in the art at the time the invention was made to include help files with software in order to increase usability.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US Patent Number 5,189,633

US Patent Number 5,343,554

US Patent Number 6,760,483

US Patent Number 6,750,864


Latex2e for Authors, July 31, 2001

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D Campbell whose telephone number is (571) 272-4133. The examiner can normally be reached on M-F (8:00 AM - 4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDC
November 23, 2004


HEATHER R. HERNDON
SUPERVISORY PATENT EXAMINER
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